

## **MEMORANDUM**

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**DATE:** January 25, 2022

**TO:** Honorable Mayor and City Commission

**VIA:** James Slaton, City Manager

**FROM:** Sarah Kirkland, Utilities Director

**SUBJECT:** Supervisory Control and Data Acquisition (SCADA) Equipment Lease Agreement through Data Flow Systems.

**SYNOPSIS:** Staff is seeking commission approval to enter into an equipment lease agreement in the amount of \$630.00 a month for 48 months for the Supervisory Control and Data equipment with Data Flow Systems.

### **STAFF RECOMMENDATION**

It is recommended that the City Commission consider taking the following action:

1. Approve the lease of equipment for interconnecting all the City's water plants, enabling off site monitoring.
2. Authorize the City Manager to execute the appropriate documents, on the City's behalf.

### **BACKGROUND**

Water demand and energy costs are rising on a global level and resources are shrinking-all while aging water infrastructures are rapidly deteriorating. These are a few reason calling for smarter technology solutions when it comes to operating and monitoring the city's various water treatment plants. Having control over our water plants allows staff to avoid excessive waste. Recent advances in technology have positioned water plant operators as a major force for system improvement, regulatory compliance, and financial planning. Supervisory Control and Data (SCADA) also makes it possible to review historical data for the sake of comparison and troubleshooting. Alarms provide another layer of security. High level or low-pressure switches pump failure, or valves not closing might trigger these alarms. The Programmable Logic Controller (PLCs) serve as an early warning system so that issues can be resolved before they become disasters.

The installation of the Supervisory Control and Data (SCADA) system allows the operators to be able to focus more on what they do best and less on tasks that can take them away from work that is more important. When implementing Supervisory Control and Data (SCADA), the Programmable Logic Controller (PLC's) take care of most of the important hourly tasks, which previously dominated the operator's daily schedule. Supervisory Control and Data (SCADA) is one way water utility operators can effectively monitor network efficiency and performance. When issues are detected, operators can quickly take action to prevent adverse public health and economic issues.

Staff currently uses the Supervisory Control and Data (SCADA) system through Data Flow for the monitoring of the city's three main water treatment plants, wastewater plant, lift stations, and reuse system. The City does save on some of the cost of installation due to already having the base of the system established. This recommendation is to extend the SCADA system to the newly acquired Park Water plant area.

Staff recommends the Commission take the following action, approve the lease of equipment for interconnecting all the City's water plants, enabling off site monitoring utilizing the Supervisory Control and Data (SCADA) network system.

#### **OTHER OPTIONS**

The commission could chose not to approve the lease agreement and staff would continue to monitor the Park Water plant manually.

#### **FISCAL IMPACT**

The \$630.00 for the lease agreement can be budgeted to the general operating budget for the water division.

#### **ATTACHMENTS**

Supervisory Control and Data (SCADA) System Equipment Lease Agreement